

34. (Amended) A diploid fungal cell comprising:

AP2 a recombinant genome, the recombinant genome comprising a first heterologous DNA functionally coupled to a first eukaryotic recombination hotspot and a second heterologous DNA functionally coupled to a second eukaryotic recombination hotspot;

the first heterologous DNA and second heterologous DNA being adapted and configured within the recombinant genome for recombination.